

# WATER CALCULATION WORKSHEET FOR \_\_\_\_\_

NAME/ADDRESS OF PROJECT \_\_\_\_\_

## INFORMATION REQUIRED TO CALCULATE WATER SERVICE SIZE

1. Demand of building in gallons per minute. WSFU's \_\_\_\_\_ = (GPM) \_\_\_\_\_
2. Difference in elevation from main or external pressure tank to building control valve. (feet) \_\_\_\_\_
3. Size of the water meter. (When applicable) 5/8" \_\_, 3/4" \_\_, 1" \_\_, 1-1/2" \_\_, 2" \_\_, 3" \_\_, 4" \_\_, 6" \_\_.
4. Developed length from main or external pressure tank to building control valve. (feet) \_\_\_\_\_
5. Low pressure at main in street or external pressure tank. (psig) \_\_\_\_\_

## CALCULATE WATER SERVICE PRESSURE LOSS

6. Low pressure at main in street or external pressure tank. (value of # 5 above) \_\_\_\_\_
7. Water service diameter is \_\_\_\_\_. Material is \_\_\_\_\_. Pressure loss per 100 ft = \_\_\_\_\_ psi. X \_\_\_\_\_ (decimal equivalent of service length, i.e.; 65ft = .65) \_\_\_\_\_  
(Subtract line 7. from line 6.) **subtotal** \_\_\_\_\_
8. Determine pressure **gain or loss** due to elevation, (multiply the value of # 2 above by .434) value of "8" \_\_\_\_\_
9. Available pressure after the bldg. control valve. (Subtract or add line 8. Enter in "B".) **subtotal** \_\_\_\_\_

## CALCULATE THE PRESSURE AVAILABLE FOR UNIFORM LOSS (VALUE OF "A")

- B. Available pressure after the bldg. control valve. (from "9" above) Value of "B" \_\_\_\_\_
- C. Pressure loss of water meter (when meter is required or installed) Value of "C" \_\_\_\_\_  
(Subtract line C. from line B.) **subtotal** \_\_\_\_\_
- D. Pressure at controlling fixture. Value of "D" \_\_\_\_\_  
(Controlling fixture is \_\_\_\_\_)  
(Subtract the value of D.) **subtotal** \_\_\_\_\_
- E. Difference in elevation between the building control valve and the controlling fixture in feet \_\_\_\_\_ X .434 psi/ft. Value of "E" \_\_\_\_\_  
(Subtract the value of E.) **subtotal** \_\_\_\_\_
- F. Pressure loss due to water treatment devices, instantaneous water heaters and backflow preventers which serve the controlling fixture. Value of "F" \_\_\_\_\_  
(Pressure loss due to \_\_\_\_\_)  
(Subtract the value of F.) **subtotal** \_\_\_\_\_
- G. Developed length from building control valve to controlling fixture in feet \_\_\_\_\_ X 1.5 Value of "G" \_\_\_\_\_  
(Divide by the value of G.) **subtotal** \_\_\_\_\_  
(Water distribution piping material is \_\_\_\_\_)  
**Multiply by** \_\_\_\_\_ 100
- A. Pressure available for uniform loss **"A" =** \_\_\_\_\_